



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/630,411	08/01/2000	Eitan Farchi	FARCHI I	5929

7590

05/07/2003

Browdy And Neimark PLLC
624 Ninth Street NW
Washington, DC 20001-5303

EXAMINER

GROSS, KENNETH A

ART UNIT

PAPER NUMBER

2122

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/630,411

Applicant(s)

FARCHI ET AL.

Examiner

Kenneth A Gross

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

The 'compare' flag indicated on Page 6, lines 11-14 is said to be added, however, it is not clear from the specification what the compare flag is added to, or what the function of the compare flag is. On Page 2, line 26, the term 'running the program' is unclear. Is the program for reading the trace file actually the utility mentioned on line 23 and not the program mentioned on line 20? On page 3, lines 17-34, the components listed appear to be listed according to a conventional numbering or lettering scheme, namely a number or letter listed between two parenthesis (e.g. (1) (2)), however the characters listed appear to be Hebrew characters and not English letters or numbers.

Claim Objections

1. Claims 7, 20-23, and 28 are objected to because of the following informalities: Claims 7, 20-23, and 28 state in the preamble "a predetermined debugger function". This should be "a predetermined debugger command". Claim 21 states "a utility which:". The term "which" should be "comprising", "containing", or the like. Claims 21 and 23 contain the term "to checks". This should be replaced with "to check". Claim 22 contains the term "writes a traced value". This should be "writing a traced value". Appropriate correction is required.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-35 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, there exists a discrepancy in the claim language and the specification regarding how debug commands are embedded in the trace file, and how the Trace_Print function mentioned in the specification identifies the debug commands. Claim 1 states that debugger commands have been previously embedded in the trace file. Claim 7 states that a traced value is replaced or augmented by a debugger command. These statements are supported by the specification on Page 5, lines 8-12. However, in Claims 2, 25, and 28, the claims mention that the utility *construes* the respective line in the trace file as a debugger command, indicating that a line in the trace file is not replaced, but simply treated as a debug command with the values differ. This functionality is supported in the specification on Page 5, lines 25-28, however it is not clearly described. Furthermore, on Page 6, lines 18-20, the label "Debug: Command" is said to exist in the trace file, where the "Command" is a debug command. It is unclear from the specification when exactly this label is placed in the trace file. Is this the debug command embedded in the trace file as indicated on Page 5, lines 8-12? Claims 18, 19, and 24 correspond to Claim 1 and are rejected for the same reasons as Claim 1. Claims 20-23, and 28 correspond to

Art Unit: 2122

claim 7 and are rejected for the same reasons as Claim 7. Claims 2, 3, 4, 6, 8-17, 25-27, and 29-35 are rejected for being dependent on rejected parent claims.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In regard to Claim 1, step (b) the step of 'running the program' is unclear. Is the program for reading the trace file mentioned in step (b) actually the utility mentioned in step (a) and not the program mentioned in the preamble of the claim? The same problem is discovered in Claims 7, 18, 19, 20, 21, 24, and 28. In regard to Claim 24, the statement "reading said trace file during running of the program". The step of initiating running of the program or the utility is omitted, and so it is unclear at what step this action occurs. In regard to Claims 2, 25, and 28, the term "construes the respective line in the trace file as a debugger command" is unclear. The trace file is said to contain values of variables. How is this construed as a debug command?

Furthermore, it is stated in parent claims that the debugger commands are embedded in the trace file in place of current values. Is this how the commands are construed? In regard to Claim 7, it is unclear from the claim language when exactly the debugger command is embedded in the trace file. In step (a)(ii) a trace file is created without debugger commands. In step (a)(iii) a debugger command that was embedded in the trace file is executed. Where then are the debugger commands embedded in the trace file? The same problem is discovered in Claims 20-23 and 28.

Art Unit: 2122

Claims 5 and 10 recite the limitation "the instrumentation statements". There is insufficient antecedent basis for this limitation in the claim. Claims 3, 4, 6, 8-17, 26, 27, and 29-35 are rejected for being dependent on rejected parent claims.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

"Using Assertions in Declarative and Operational Models for Automated Debugging" by Peter Fritzson et al., 1994.

"Generalized Algorithmic Debugging and Testing" by Peter Fritzson et al., 1992.

"Deterministic Replay of Java Multithreaded Applications", by Jong-Deok Choi and Harini and Drinivasan, 1998.

"Implicit-Specification Errors and Automatic, Trace-Based Debugging", by Edward G Okie and James D. Arthur, 1993.

"Dynamic Program Slicing" by Hiralal Agrawal and Joseph R. Horgan, 1990.

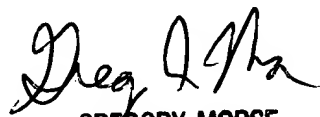
Shagam (U.S. Patent Number 6,311,326) teaches debugging and tracing by evaluating program variables.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Gross whose telephone number is (703) 305-0542. The examiner can normally be reached on Mon-Fri 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A Morse can be reached on (703) 308-4789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

KAG
April 28, 2003


GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100